A NEW ASPIDIOTUS FROM PINUS SYLVESTRIS.

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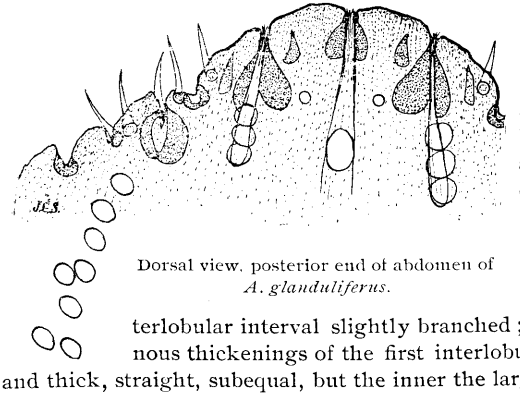
Aspidiotus (*Diaspidiotus*) *glanduliferus* n. sp. Female scale large, 2 mm. diameter, slightly convex, blackish (the color of the bark), with large subcentral to sublateral orange-ferruginous or almost vermillion exuviae, readily exposed by rubbing. Removed from the bark, the scale leaves a conspicuous white patch. Male scale oval, broad, with covered exuviae and a white dot and ring.

Female, broad oval, with a deep constriction between head and thorax; the thoracic segments also strongly marked by lateral constrictions. Color bright orange; caudal margin stained with dark red brown. Anal orifice extremely small, level with second dorsal gland of first row. Five groups of circumgenital glands; median 4, anterior laterals 16 to 17, posterior laterals 7 to 8, Dorsal pores very numerous, in four series; the first (below first interlobular incision) of three in a row; the second of 17, and then after a short break, 9 more; the third of over 30; the fourth (in an irregular line commencing near the margin) of about 11. Median lobes very large but broad and low, hardly at all produced; second lobes similar but smaller and more or less serrulate on the margin; third lobes represented by a small angular prominence; plates spine-like, the larger one of the first interlobular interval slightly branched; spines quite large, chitinous thickenings of the first interlobular interval rather short and thick, straight, subequal, but the inner the larger.



Dorsal view, posterior end of abdomen of *A. glanduliferus*.

Habitat: Abundant on small branches of *Pinus sylvestris* on the campus of the Ohio State University, Columbus, O., collected by Mr. J. G. Sanders. On the leaves of the same tree are some *Chionaspis pinifoliae* Fitch.

A. glanduliferus is related to *A. ostreaformis*, and has, I suspect, been introduced from Europe, although not yet known there. It is very easily distinguished from *ostreaformis* by the much more numerous dorsal glands, the form of the second lobe, and the position of the anal orifice; the shape of the female is also different.

It is also closely allied to *A. fernaldi* Ckll., but that, while similar in the shape of the insect and the form of the lobes, differs by the very unequal processes of the first interlobular interval, the much smaller anterior lateral groups of circumgenital glands, and the fewer dorsal glands, which are in *fernaldi* about as follows: First series of 3, second of 9, third of 13, fourth of 8.

It is also close to *A. fernaldi albiventer* Hunter, but that has not enough dorsal glands; the form of the median lobes is different, and the anterior lateral group of glands does not exceed 12. (*A. fernaldi albiventer* is the same as *A. fernaldi cockerelli*; the Canadian Entomologist containing the latter was published before the Kansas University Quarterly containing the former, but Prof. Hunter privately distributed separates in December, before the Can. Entomologist appeared. Mr. Parrot's designation was the first in Mss.)

A. glanduliferus differs from *A. erhorni* Coleman Mss. (on *Abies* in California) by the much smaller anal orifice, more numerous dorsal glands, well developed second lobe, shape of insect, etc.